

Please type a plus sign (+) inside this box → ☐

PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | |
|--|------------------------|---|
| UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR 1.53(b)) | Attorney Docket No. | 62020-1220 |
| | First Inventor | Mule, et al. |
| | Title | BACK-SIDE-OF-DIE, THROUGH-WAFER GUIDED-WAVE OPTICAL CLOCK DISTRIBUTION NETWORKS, METHODS OF FABRICATION THEREOF, AND USES THEREOF |
| | Express Mail Label No. | EV 269333224 US |

| | |
|--|--|
| APPLICATION ELEMENTS See MPEP Chapter 600 concerning utility patent application contents | ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 |
|--|--|

☐ APPLICANT REQUESTS EARLY PUBLICATION UNDER 37 CFR 1.219 (additional fee)

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status. See CFR 1.27
3. ☒ Specification
(preferred arrangement set forth below) [Total Pages **39**]
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed. Sponsored R&D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 USC 113) [Total Sheets **4**]
5. ☐ Oath or Declaration [Total Pages **4**]
 - a. ☒ Newly Executed (original or copy)
 - b. ☐ Copy from a prior application (37 CFR §1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application,
see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

Assignee
Name and Address
(if applicable)

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. ☐ Computer Readable Copy (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ Paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & Documents(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☐ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: _____

18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: /

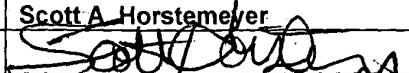
Prior application information: Examiner _____

Group / Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: the entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. This incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label **24504**
(Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

| | | | |
|-------------------|---|-----------------------------------|--------------|
| NAME | Scott A. Horstemeyer Thomas, Kayden, Horstemeyer & Risley, L.L.P. | | |
| ADDRESS | 100 Galleria Parkway Suite 1750 | | |
| CITY | Atlanta | STATE | Georgia |
| COUNTRY | U.S.A. | TELEPHONE | 770-933-9500 |
| | | ZIP CODE | 30339-5948 |
| | | FAX | 770-951-0933 |
| Name (Print/Type) | Scott A. Horstemeyer | Registration No. (Attorney/Agent) | 34,183 |
| Signature |  | Date | 7/30/03 |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: **Mule, et al.**For: **BACK-SIDE-OF-DIE, THROUGH-WAFER GUIDED-WAVE OPTICAL CLOCK DISTRIBUTION NETWORKS, METHODS OF FABRICATION THEREOF, AND USES THEREOF****CERTIFICATE OF EXPRESS MAIL**

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

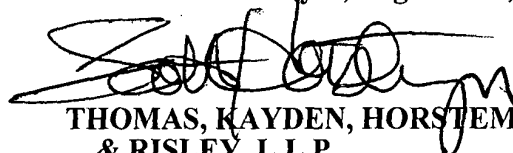
Sir:

Enclosed for filing in the above case are the following documents:

Return Postcard
Utility Patent Application Transmittal Page
Fee Transmittal Page
Utility Patent Application Consisting Of:
27 Pages of Specification
11 Pages of Claims (Claims 1-37)
1 Page of Abstract
4 Pages of Formal Drawings (Figs. 1A-4F)
Declaration (Unexecuted)
Credit Card Authorization in the Amount of \$1,644.00

Further, the Commissioner is authorized to charge Deposit Account No. 20-0778 for any additional fees required. The Commissioner is requested to credit any excess fee paid to Deposit Account No. 20-0778.

Respectfully submitted,

Scott A. Horstemeyer, Reg. No. 34,183

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**
100 Galleria Parkway, N.W.
Suite 1750
Atlanta, Georgia 30339-5948

Our Docket No: **62020-1220**

I hereby certify that all correspondence listed above are being deposited for delivery to the above addressee, with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 CFR §1.10 on the date indicated below:

The envelope has been given U.S. Postal Service "Express Mail Post Office To Addressee" Package # **EV 269333224 US**.

Date:

7/30/03
Jo Bryan

17169 U.S. PTO
07/30/03

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revisions.

Complete If Known

| | |
|----------------------|----------------|
| Application Number | To be assigned |
| Filing Date | July 30, 2003 |
| First Named Inventor | Mule, et al. |
| Examiner Name | To be assigned |
| Group / Art Unit | To be assigned |
| Attorney Docket No. | 62020-1220 |

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**1,644.00**

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account

Deposit Account Number

20-0778

Deposit Account Name

Thomas, Kayden, Horstemeyer Risley, L.L.P.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description | Fee Paid |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------|
| 1001 | 750 | 2001 | 375 | Utility Filing Fee | 750.00 |
| 1002 | 330 | 2002 | 165 | Design Filing Fee | |
| 1003 | 520 | 2003 | 260 | Plant Filing Fee | |
| 1004 | 750 | 2004 | 375 | Reissue Filing Fee | |
| 1005 | 160 | 2005 | 80 | Provisional Filing Fee | |
| SUBTOTAL (1) | | | | | (\$750.00) |

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| | Extra Claims | Fee From Below | Fee Paid |
|--------------------|--------------|----------------|--------------------|
| Total Claims | 37 | 17 | X 18.00 = \$306.00 |
| Independent Claims | 10 | 7 | X 84.00 = \$588.00 |
| Multiple Dependent | | | 140.00 = 0 |

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description | Fee Paid |
|-----------------------|-----------------------|-----------------------|-----------------------|---|------------|
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 | |
| 1201 | 84 | 2201 | 42 | Independent claims in excess of 3 | |
| 1203 | 280 | 2203 | 140 | Multiple dependent claim, if not paid | |
| 1204 | 84 | 2204 | 42 | **Reissue independent claims over original patent | |
| 1205 | 18 | 2205 | 9 | **Reissue claims in excess of 20 and over original patent | |
| SUBTOTAL (2) | | | | | (\$894.00) |

**or number previously paid, if greater; For Reissues, see above

FEES CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description | Fee Paid |
|-----------------------|-----------------------|-----------------------|-----------------------|--|----------|
| 1051 | 130 | 2051 | 65 | Surcharge-late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge-late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 410 | 2252 | 205 | Extension for reply within second month | |
| 1253 | 930 | 2253 | 465 | Extension for reply within third month | |
| 1254 | 1,450 | 2254 | 725 | Extension for reply within fourth month | |
| 1255 | 1,970 | 2255 | 985 | Extension for reply within fifth month | |
| 1401 | 320 | 2401 | 160 | Notice of Appeal | |
| 1402 | 320 | 2402 | 160 | Filing a brief in support of an appeal | |
| 1403 | 280 | 2403 | 140 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive-unavoidable | |
| 1453 | 1,300 | 2453 | 650 | Petition to revive-unintentional | |
| 1501 | 1,300 | 2501 | 650 | Utility issue fee (or reissue) | |
| 1502 | 470 | 2502 | 235 | Design issue fee | |
| 1503 | 630 | 2503 | 315 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee for provisional application | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 750 | 2809 | 375 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 1810 | 750 | 2810 | 375 | For each add. invention to be examined (37 CFR 1.129(b)) | |
| 1801 | 750 | 2801 | 375 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited exam. of a design application | |

Other fee (specify)

SUBTOTAL (3) (\$)

*Reduced by Basic Filing Fee Paid

SUBMITTED BY

| | | | | |
|-----------------------|-----------|------------------|------------------|---------|
| Typed or Printed Name | Signature | Registration No. | Telephone Number | Date |
| Scott A. Horstemeyer | | 34,183 | 770-933-9500 | 7/30/03 |

WARNING: Information on this form may become public. Credit Card information should not

Be included on this form. Provide credit card information and authorization on PTO-2036

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is covered by 37 USC 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.